

# **Audit**



# **Report**

OFFICE OF THE INSPECTOR GENERAL

**PROCUREMENT PRICES PAID FOR AIRCRAFT  
WEAPONS SYSTEMS FOR FOREIGN MILITARY SALES**

Report No. 93-163

September 2, 1993

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**Department of Defense**

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**The following abbreviations and acronyms are used in this report.**

ASC.....	Aeronautical Systems Center
ASN(RD&A).....	Assistant Secretary of the Navy (Research, Development and Acquisition)
DFARS.....	Defense Federal Acquisition Regulation Supplement
EPE.....	Enhanced Performance Engine
FAR.....	Federal Acquisition Regulation
FMS.....	Foreign Military Sales
GE.....	General Electric Company
LOA.....	Letter of Agreement
McAir.....	McDonnell Aircraft Company
NAVAIR.....	Naval Air Systems Command
PCAP.....	Pilot Contracting Activity Program
P.L.....	Public Law
PNM.....	Price Negotiation Memorandum
R&D.....	Research and Development
RDT&E.....	Research, Development, Test and Evaluation
U.S.C.....	United States Code



INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE  
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September 2, 1993

MEMORANDUM FOR DIRECTOR OF DEFENSE PROCUREMENT  
COMPTROLLER OF THE DEPARTMENT OF DEFENSE  
ASSISTANT SECRETARY OF THE NAVY (FINANCIAL  
MANAGEMENT)  
ASSISTANT SECRETARY OF THE AIR FORCE (FINANCIAL  
MANAGEMENT AND COMPTROLLER)  
INSPECTOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Audit Report on Procurement Prices Paid for  
Aircraft Weapons Systems for Foreign Military Sales  
(Report No. 93-163)

We are providing this final report for your information and use. The report addresses whether the prices paid to DoD contractors for aircraft weapons systems procured for foreign military sales customers were reasonable, compared to the prices DoD paid for similar items. We received comments on a draft of this report from the Director of Defense Procurement, the Assistant Secretary of the Navy (Research, Development and Acquisition), and the Deputy Assistant Secretary of the Air Force for Acquisition. We considered all comments in preparing the final report.

DoD Directive 7650.3 requires that all audit recommendations be resolved promptly. Therefore, the DoD Comptroller, the Navy, and the Air Force are requested to comment on the final report by November 5, 1993. Those comments must indicate concurrence or nonconcurrence with the recommendations in Part II. Recommendations and potential monetary benefits are subject to resolution in accordance with DoD Directive 7650.3 in the event of nonconcurrence or failure to comment. See the "Response Requirements for Recommendations" section at the end of each finding for the recommendations you must comment on and the specific requirements for your comments. We also ask that your comments indicate concurrence or nonconcurrence with the internal control weaknesses highlighted in Part I.

The courtesies extended to the audit staff are appreciated. If you have any questions about this audit, please contact Mr. Alvin L. Madison at (703) 614-1681 (DSN 224-1681), or Mr. Robert W. Otten at (703) 693-0651 (DSN 223-0651). Appendix D lists the distribution of this report.

A handwritten signature in cursive script, reading "Robert J. Lieberman", is positioned above the typed name.

Robert J. Lieberman  
Assistant Inspector General  
for Auditing

Office of the Inspector General, DoD

AUDIT REPORT NO. 93-163  
(Project No. 1FA-0061)

September 2, 1993

PROCUREMENT PRICES  
PAID ON AIRCRAFT WEAPONS SYSTEMS  
FOR FOREIGN MILITARY SALES

EXECUTIVE SUMMARY

**Introduction.** The audit focused on procurement prices paid for aircraft weapons systems sold to foreign military sales (FMS) customers. From FY 1985 through FY 1991, FMS customers ordered aircraft weapons systems worth \$7.5 billion. The Air Force's F-15 and F-16, the Navy's F/A-18 fighter aircraft, and the Army's AH-64 attack helicopter accounted for \$6.8 billion (92 percent) of the total orders for aircraft weapons systems procured for FMS customers.

**Objectives.** The objective of the audit was to determine whether the prices paid to DoD contractors for aircraft weapons systems procured for FMS customers were reasonable, compared to the prices DoD paid for similar items. We also evaluated the adequacy of internal controls over the preparation and maintenance of supporting documents that were used to justify price differentials and determine profits for FMS contracts.

**Audit Results.** In general, the prices FMS customers paid for the Apache helicopter and its components were fair and comparable to the prices paid by the Army. Also, the audit did not disclose any problems with the Air Force's procurement pricing of aircraft weapons systems for FMS. However, DoD guidelines are unclear on what cost-sharing methodology was appropriate for F/A-18 engines. Also, the Navy and the Air Force did not adequately document their methods of determining contractor profit rates when negotiating contracts for FMS procurements.

o FMS customers were charged \$140,000 more per F/A-18 engine than they would have been if nonrecurring RDT&E costs had been prorated over the entire engine population, but it is unclear if proration was required. The Navy signed an agreement permitting contractors to recoup \$56 million in research and development costs from funds paid by FMS customers, while the Navy made in-kind contributions of \$23.5 million to engine research and development (Finding A).

o Navy and Air Force contracting officers did not adequately document how they developed guidelines for determining contractors' profits on negotiated contracts (Finding B).

**Internal Controls.** This report identified a material internal control weakness within two commands, where Navy and Air Force contracting officers did not adequately document how they developed weighted guidelines for negotiating contractor profits (Finding B). See Part I for a description of the controls assessed.

**Potential Benefits of Audit.** Implementing the recommendations in this report should help ensure that FMS customers receive the same pricing protection as DoD for similar items. Benefits are summarized in Appendix B.

**Summary of Recommendations.** We recommended that the Comptroller, DoD, revise DoD Directive 2140.2 to clarify the special RDT&E provisions. We further recommended that the Navy and the Air Force's contracting officers comply with DoD regulations for adequately documenting the profit rates awarded for procurement of aircraft weapons systems.

**Management Comments.** The Under Secretary of the Navy for Research, Development and Acquisition nonconcurred with Findings A. and B. and Recommendation A.1., but concurred with Recommendations A.2. and B. Recommendation A.1. has been revised and redirected to the Comptroller, DoD. We requested comments from the Comptroller, DoD, on the revised recommendation. The Deputy Assistant Secretary of the Air Force for Acquisition nonconcurred with Finding B. and Recommendation B. We asked the Navy and the Air Force to reconsider their positions on the nonconcurrences when responding to the final report. We also requested that the Navy provide an estimated completion date for the action planned on Recommendation B. Based on the comments received from the Director, Defense Procurement, we deleted draft report Finding C. and Recommendations C.1. and C.2. See Part II for a full discussion of management's comments and Part IV for the complete text of management's comments.

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This report was prepared by the Financial Management Directorate, Office of the Assistant Inspector General for Auditing, DoD. Copies of the report can be obtained from the Reports Distribution Unit, Audit Planning and Technical Support Directorate, (703) 614-6303 (DSN 224-6303).

## PART I - INTRODUCTION

### Background

The U.S. Government procures Defense articles and services for foreign governments through foreign military sales (FMS) agreements. The Defense Security Assistance Agency is responsible for overall coordination and implementation of FMS agreements. These agreements require DoD to procure items and services for foreign customers under the same DoD regulations and procedures that DoD uses to procure for itself. Contracting officers in the Military Departments are responsible for procurements for FMS customers.

Laws and regulations. The DoD Federal Acquisition Regulation Supplement (DFARS), Subpart 225.73, gives FMS acquisition policies and procedures, which are governed by the Arms Export Control Act (the Act). Section 22 of the Act (Public Law [P.L.] 90-629, as amended) authorizes DoD to enter into contracts for the resale of Defense articles to foreign countries. Also, DFARS 225.7301(b) requires that when procuring Defense articles or services for foreign governments, DoD will use the same contract clauses and administer the contracts in the same manner as when procuring for itself, except where the DFARS allows deviations.

### Objectives

The overall objective of this audit was to determine whether prices paid to DoD contractors for aircraft weapons systems for FMS customers were reasonable compared to the prices paid by DoD for similar items. We also determined whether DoD had established the necessary internal controls to ensure that FMS customers received the same pricing protection as DoD for procurements.

### Scope

Selection of sample. We obtained reports from the Defense Security Assistance Agency on FMS Letters of Agreement (LOAs) for combat aircraft weapons systems procured between January 1, 1985, and April 30, 1990. The total estimated value of those agreements was \$7.5 billion. From the reports, we selected for review the Army's Apache (AH-64) attack helicopter, the Navy's Hornet (F/A-18) fighter/attack aircraft, and the Air Force's Eagle (F-15) and Fighting Falcon (F-16) tactical fighters. Those aircraft accounted for \$6.8 billion (92 percent) of the \$7.5 billion. From the Army Aviation Systems Command, the Naval Air Systems Command (NAVAIR), and the Air Force Aeronautical Systems Center (ASC), we obtained a list of contracts awarded between FYs 1985 and 1991 to meet DoD and FMS requirements. We reviewed price negotiation memorandums (PNMs), field pricing and technical

reports, progress payment vouchers, and other contract documents for aircraft frames, engines, and electronic systems that constituted at least 70 percent of the flyaway cost <sup>1/</sup> of the helicopter and aircraft systems we reviewed. We analyzed price differences between DoD and FMS procurements of similar models and configurations.

The scope of our audit was limited because the Navy's contract files did not give a detailed history of contract actions for FY 1985 and 1987 procurements of F/A-18 airframes for FMS customers. Because Navy officials did not maintain complete documentation, we could not fully verify price differences between procurements for the Navy and FMS customers. As a result, we were not sure that any price differences were justified. This problem had been previously identified by the General Accounting Office and the Naval Audit Service. NAVAIR officials stated that they were establishing a microfiche system and developing a checklist to standardize the Navy's contract files.

This program audit was made from July 1991 through May 1992. The audit was performed in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD, and accordingly included such tests of internal controls as were considered necessary. Organizations visited or contacted during the audit are listed in Appendix C.

**Technical expert.** In the area of contract pricing, we were assisted by a contract specialist from the Office for the Assistant Inspector General for Auditing, Audit Planning and Technical Support Directorate.

### **Internal Controls**

**Controls assessed.** We evaluated the internal controls that DoD contracting officers and pricing officials used to ensure that Federal Acquisition Regulation (FAR) and DFARS procedures were applied so that FMS customers would receive fair and reasonable prices compared to the prices that DoD paid for weapons systems procurements. Specifically, we evaluated the adequacy of documentation maintained to justify:

- o differences between DoD and FMS contract prices, and
- o profit rates awarded for contract type risk.

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<sup>1/</sup> Flyaway cost includes the cost of procuring the airframe, engines, electronics, and other Government-furnished components, and nonrecurring costs for research, development, and production.



**Internal control weaknesses.** We identified two material internal control weaknesses as defined by P.L. 97-255, Office of Management and Budget Circular A-123, and DoD Directive 5010.38. NAVAIR did not maintain detailed supporting documentation to explain price differences between DoD and FMS aircraft procurements. NAVAIR officials negotiated prices for FMS aircraft weapons systems by adding and deleting cost factors from DoD's previously negotiated prices; they could not subsequently provide the details. Their PNMs did not explain the costs that were changed, and NAVAIR could not locate documentation to explain the rationale for the contract pricing. NAVAIR conducted management studies in 1989 and implemented procedures to ensure that contract files were reviewed by responsible officials and contained a complete history of contract actions. Therefore, we did not recommend that the Navy take further corrective actions in this area. However, management should monitor contract files to ensure that they are complete.

Navy and Air Force PNMs did not explain how contracting personnel developed weighted guidelines for determining contractor profit rates. These internal control weaknesses at the command level are discussed in Finding B.

#### **Prior Audits and Other Reviews**

**Pricing irregularity.** The Office of the Assistant Inspector General for Auditing issued Report No. 88-068, "Audit of the MK-46 Torpedo Program," on January 11, 1988. The report stated that in a contract for an MK-46 torpedo procured for an FMS customer, a pricing irregularity inflated the price of the torpedo; if the irregularity had not been identified, Canada and Turkey would have been overcharged more than \$10 million. The Navy agreed to reprice the MK-46 torpedoes sold to Canada and Turkey, but disagreed with the report's conclusions about the Naval Sea Systems Command's involvement. To ensure proper allocation of recurring costs between the U.S. Government and FMS customers, the Navy stated that it would review all active noncompetitive FMS contracts exceeding \$1.0 million. The auditors considered the Assistant Secretary of the Navy's comments to be fully responsive to the recommendations. The current audit was intended to identify similar instances in the procurement of aircraft weapons systems for FMS. We found no such irregularities, but if material internal control weaknesses are not corrected, irregularities could occur.

**Excess profit over justifiable risk.** The Office of the Assistant Inspector General for Auditing issued Report No. 92-048, "Unfinitized Contractual Actions," on February 14, 1992. This report stated that contracting officers did not effectively ensure that costs incurred by contractors were considered during negotiations. The report concluded that DoD

buying activities awarded excess profits of \$40.8 million when contractors had already incurred substantial costs, lowering the justifiable risks. The Director, Defense Logistics Agency, agreed to instruct the contracting officers and contract administrators to establish procedures requiring compliance with regulations for negotiating undefinitized contract actions. The auditors considered management's actions to be responsive to the recommendations. FMS contract actions were not reviewed.

## PART II - FINDINGS AND RECOMMENDATIONS

### A. RESEARCH AND DEVELOPMENT COSTS FOR THE ENHANCED PERFORMANCE ENGINE

Current guidance is unclear regarding what constitutes a special or unique FMS requirement. DoD Directive 2140.2 does not clarify whether a feature remains an FMS-unique requirement if the U.S. Government expresses an intention to use that feature before or during its development. In the case of the F404-GE-402 enhanced performance engine (EPE), the Navy assumed that the engine was a special FMS requirement and did not pay a full pro rata share of nonrecurring R&D costs. As a result, FMS customers will pay \$15.4 million more than their pro rata share.

#### DISCUSSION OF DETAILS

##### Background

The Arms Export Control Act of 1976 (the Act), as amended, states that Defense articles and services may be acquired for, and sold to, any friendly country. Section 21(e)(1) of the Act states that the sale of Defense articles shall include appropriate charges for a proportionate amount of any nonrecurring costs for the research, development, and production of major Defense equipment. DFARS 225.7301(b) requires DoD acquisitions for FMS to be conducted using the same contracting procedures as other DoD acquisitions. DFARS 225.7303 requires that standard DoD acquisition procedures be used for pricing and contract administration on FMS contracts. DoD Manual 7290.3-M, "Foreign Military Sales Financial Management Manual," paragraph 70303(A), September 1989, requires the pricing of Defense articles to be based on the same cost principles that are used to price contracts for items for DoD use. DoD Directive 2140.2, "Recoupment of Nonrecurring Costs on Sales of U.S. Products and Technology," paragraph F-1, August 5, 1985, provides for calculating and assessing charges for the recoupment by FMS customers of their research and development investment in equipment unique to their requirements. This provision normally applies when a foreign customer improves existing Defense articles. When non-DoD customers benefit from the purchase of the improved item, the country that financed the development recovers its investment by billing those customers for pro rata shares. The Directive also stipulates that the U.S. Government shall not be charged any nonrecurring research, development, test and evaluation costs if it adopts the special features for its own use.

Development of the EPE. Between FYs 1976 and 1990, the Navy procured the F/A-18 aircraft equipped with GE F404-GE-400 engines. When the Navy issued requests for proposal for the FY 1990 procurement of F404-GE-400 engines, GE's proposal

included an option to procure the undeveloped F404-GE-402 EPE. The EPE is derived from the F404-GE-400 engine, with increased thrust of up to 20 percent and reduced fuel consumption. The Navy did not plan to offer an R&D contract to GE to develop the EPE. The NAVAIR, in an August 10, 1987, message to the Assistant Secretary of the Navy for Shipbuilding and Logistics (Subject: Pilot Contracting Activity), referred to a request by Kuwait and Switzerland. The request was, in part, that:

...the Navy consider forward fitting the [EPE] engine in Navy [aircraft] in order to achieve communality and avoid a unique FMS configured engine [and] in exchange, they were willing to pay a prorata share of the development costs.

The Government of Kuwait was interested in buying the F/A-18 equipped with the EPE, but was unwilling to finance the entire development cost of the engine. NAVAIR's August 10, 1987, message also stated:

Since the [USN] expects to procure the EPE engine in FY 1991, the Navy will benefit from the increase[d] performance of the engine by participating in the development of the engine. Future sales of the F/A-18 will also be enhanced[,], which can result in a direct savings to the Navy.

In a July 1988 letter from the Deputy Director of the Navy Office of Technology Transfer and Security Assistance to the Director, Technical Affairs Kuwait Air Force/Air Defense, the Deputy Director stated that the Navy agreed in principle to procure EPE engines in future Navy acquisitions.

The Government of Kuwait signed an agreement on August 27, 1988, to buy 40 aircraft equipped with the EPE. On March 7, 1989, NAVAIR obtained formal approval from the Under Secretary of the Navy to buy the EPE beginning in FY 1991. The Under Secretary of the Navy was informed that his approval was required as soon as possible because the Navy had to have a firm commitment to the EPE program so that the contractors would pay R&D costs for the engine. Contractors were willing to bear a substantial risk in developing the EPE, provided they could recover the costs through U.S. Government sales of the engine to foreign customers or through direct commercial sales.

**FAR provisions.** FAR 31.205-48, "Deferred Research and Development Costs," stated that R&D costs incurred prior to the award of a contract are unallowable, unless approved by the Government as precontract costs. To allow the contractors to

recoup \$56 million in R&D costs for the EPE, NAVAIR asked the Assistant Secretary of the Navy (Shipbuilding and Logistics) (ASN[S&L]) to approve a deviation from the FAR. NAVAIR requested the deviation in December 1988; on March 16, 1989, ASN(S&L) returned the request without action, suggesting that it be resubmitted under DoD's Pilot Contracting Activity Program (PCAP).

Pilot Contracting Activity Program. Under PCAP, the Secretaries of the Military Departments could delegate to their contracting directors the authority to waive DoD procurement regulations that are not required by statute or Executive order, and to deviate from the FAR and DFARS. The immediate goal of PCAP was to place a strong emphasis on quality and timeliness, as well as price, to get the best value. Long-term goals were to test ideas for improving the contracting process and make permanent regulatory changes.

On May 9, 1989, NAVAIR used PCAP to request a deviation from the FAR 31.205-48. The deviation would permit contractors to recoup the EPE's development costs from FMS and commercial customers. On May 10, 1989, the ASN(S&L) approved the deviation, with three conditions:

- o foreign customers would be told that the Navy was exempt from paying R&D costs;

- o foreign customers would be given a reasonable alternative to purchasing the EPE if they did not wish to share in R&D costs; and

- o contractors would not be paid before they incurred R&D costs.

The PCAP was discontinued in December 1989. However, the cancellation was not retroactive, so it did not affect NAVAIR's request to deviate from the FAR and DFARS policy for recoupment of R&D costs.

Advance agreement. While awaiting approval of the deviation from the FAR, NAVAIR and the contractors negotiated an advance agreement. The agreement outlined the recoupment procedures for R&D costs, and limited the amount that R&D contractors could recover to \$56 million out of \$79.5 million in costs incurred. The agreement stipulated that FMS and commercial customers would be assessed a pro rata charge for each EPE delivered, up to 560 engines. R&D charges not to exceed \$140,000 per engine were to be added to the FMS contracts. The contractors agreed that they would not attempt to recover the \$56 million in R&D charges from the Navy.

**Navy's contribution to R&D effort.** On October 31, 1989, NAVAIR requested and received approval from the ASN(S&L) to enter into a lease agreement with McAir. Under this lease, the Navy would provide one F/A-18 aircraft and five engines to the R&D contractors. Rental charges for the aircraft and engines were to be waived, and contractors would be charged DoD user rates instead of higher commercial rates for the use of Navy testing facilities. The R&D contractors would provide the Navy with all development data from ground and flight testing of the aircraft and engines.

NAVAIR estimated that its contribution to R&D costs of the EPE saved the contractors \$23.5 million. NAVAIR officials said that, if they had not leased the aircraft and engines at no cost to the contractors, the contractors would have had to spend \$23.5 million to purchase them. Under the Navy's acquisition plan, an estimated 537 EPEs would be purchased by FY 1994. Because of the Navy's contribution of \$23.5 million, the contractor avoided spending \$43,761 in R&D costs on each EPE purchased by the Navy, up to the estimated 537 engines.

The Navy's \$23.5 million contribution does not represent a pro rata share of R&D costs for the EPE. If the contractors' R&D costs of \$56 million and the Navy's contribution of \$23.5 million were divided by the total 1,097 engines (537 Navy plus 560 FMS engines), the pro rata share would be \$72,470 per engine. Therefore, the Navy contributed \$28,709 (\$72,470 minus \$43,761) less than it would have to the R&D costs of each engine if a proration method involving the Navy had been used. When multiplied by 537 engines, this equals \$15.4 million.

**Conclusion.** Current guidelines do not clearly address the circumstances related to the EPE research and development effort. First, the guidance focuses on recouping costs financed by U.S. RDT&E appropriations, not precontract costs incurred by contractors. Second, DoD Directive 2140.2 does not explicitly define what constitutes a special RDT&E requirement for an FMS customer. The Directive states that the U.S. Government will not share nonrecurring RDT&E costs for features developed in response to a special FMS requirement if the U.S. Government adopts those features. We infer that this provision relates to special features adopted by DoD after the development effort. Otherwise, if DoD adopts a feature before or during its development, it would be illogical to regard that feature as a special FMS requirement.

The Navy defined the EPE as a special FMS requirement and therefore believed its contribution to the EPE RDT&E effort was fair and reasonable. The Navy viewed the formal approval for including the EPE in the Navy acquisition program as the adoption of features developed for a special FMS requirement. Our interpretation is different. We believe that the Navy's explicit

expressions of intent to buy the EPE, voiced internally in 1987 and to the Government of Kuwait before the LOA was signed in 1988, cast doubt on the treatment of the EPE as a special FMS requirement for purposes of applying the philosophy of the special RDT&E cost-sharing provision of DoD Directive 2140.2.

In the absence of definitive interpretation or clarification of the guidance, we changed the draft audit report's references to a pricing issue on the EPE. Recommendation A.1. (B.1. in the draft audit report) has been changed and redirected to the Comptroller, DoD, as the proponent of DoD Directive 2140.2.

#### RECOMMENDATIONS FOR CORRECTIVE ACTION

1. We recommend that the Comptroller, DoD, revise DoD Directive 2140.2 to clarify the special provisions for research, development, test and evaluation.
2. We recommend that the Commander, Naval Air Systems Command, comply with provisions of the Federal Acquisition Regulation when allocating nonrecurring costs for research and development, to avoid dual pricing of aircraft engines for foreign military sales and DoD sales.

#### MANAGEMENT COMMENTS

The Director of Procurement Policy, Office of the Assistant Secretary of the Navy (Research, Development and Acquisition) nonconcurred with our statement in Finding A. (Finding B. in the draft report) that the Navy did not pay its pro rata share of R&D costs. The Navy stated that its contributions of an F/A-18 aircraft, five F404 engines, and test facilities and personnel, with a value of \$23.5 million, were equitable contributions to the development of the EPE.

The Navy nonconcurred with Recommendation A.1. (Recommendation B.1. in the draft report) to require FMS customers to pay no more than their pro rata share of R&D costs for the EPE. The Navy stated that it was in compliance with DoD Directive 2140.2 because the R&D was performed for the unique benefit of foreign customers, and the full costs should be paid by those customers. The Navy also stated that, pursuant to DoD Directive 2140.2, the U.S. Government should not be charged any nonrecurring recoupment charge if it adopts the EPE for its own use.

The Navy concurred with Recommendation A.2. (Recommendation B.2. in the draft report). Refer to Part IV for the full text of management's comments.

#### AUDIT RESPONSE TO MANAGEMENT COMMENTS

Although we interviewed a coauthor of DoD Directive 2140.2 and received input from the Office of the General Counsel, DoD, we found no definitive interpretation of DoD Directive 2140.2. We disagree with the Navy's assertions that the special RDT&E provisions of DoD Directive 2140.2 clearly apply.

The Government of Kuwait was interested in buying the F/A-18 equipped with the EPE, but was unwilling to finance the entire development cost of the engine. Kuwait's position on financing indicates that the Kuwaitis did not view the EPE as satisfying a unique requirement of that country. In fact, the Kuwaitis sought and received U.S. Government assurance that they would not be the only users of the EPE, and were advised that the Navy was incorporating the EPE into the F/A-18 configuration baseline. The documents we reviewed showed that the Navy intended to buy the EPE as early as 1987, a year before the LOA was signed on August 27, 1988, and to assist in the R&D effort by contributing equipment and the use of test facilities and personnel. Given the large number of EPEs (537) to be procured by the Navy and the small number to be procured by Kuwait (40), the Navy was the chief beneficiary of the R&D effort.

As discussed in the finding, we believe that DoD Directive 2140.2 should be clarified regarding what constitutes adoption of a special RDT&E feature by the DoD and whether the U.S. Government bears any cost-sharing responsibility if it adopts a feature before or during development.

#### RESPONSE REQUIREMENTS FOR RECOMMENDATION

Responses to the final report are required from the addressees shown for the items indicated with an "X" in the chart below.

<u>Number</u>	<u>Addressee</u>	<u>Response Should Cover:</u>		
		<u>Concur/ Nonconcur</u>	<u>Proposed Action</u>	<u>Completion Date</u>
A.1.	Comptroller, DoD	X	X	X



## **B. NEGOTIATING CONTRACTORS' PROFIT RATES**

Navy and Air Force contracting officers negotiated fixed-price contract profit rates for the F-15, F-16, and F/A-18 aircraft without supporting the level of contract type risk<sup>2/</sup> awarded. The Navy and Air Force price negotiation memorandums (PNMs) did not adequately explain and document the rationale used to assess contract type risk and profit rates awarded when costs incurred represented more than 50 percent of the negotiated contract price. Consequently, there was less assurance that the Navy and Air Force contracting officers did not award higher profit rates for contract type risk than were warranted by the costs incurred on the contracts.

### **DISCUSSION OF DETAILS**

#### **Background**

DFARS 215.971, "Weighted Guidelines Method," describes DoD's method of using weighted guidelines to determine profits for negotiated contract prices. DoD contracting officers use DD Form 1547, "Record of Weighted Guidelines Application," to develop pricing objectives and summarize profits that are subsequently negotiated. Contracting officers must take into account the risk to the contractor for a particular type of contract (contract type risk). DFARS 215.808(a)(10)(B) also requires that the contracting officer's PNM should include a DD Form 1547, if weighted guidelines were used, that explains how the profit rate was determined.

DFARS 215.971-3(c) establishes a normal and designated range of values that contracting officers may assign for contract type risk. In determining contract type risk, contracting officers can recognize any additional risks associated with contracts for FMS. Contractors need to demonstrate that there are substantial risks beyond those normally present in DoD contracts for similar Defense articles.

A fixed-price contract would normally be assessed a higher risk than a cost-type contract (cost-plus-incentive or cost-plus-fixed-fee). DFARS 215.971-3(d)(2) requires that "DoD contracting officers shall assess the extent to which costs have been incurred prior to definitization of the contract action." When contractors have already incurred a considerable portion of the total costs before prices are definitized, contracting officers should assess the contract type risk at the low end of the range designated in the DFARS, and may assign values as low as zero percent of the total allowable cost for contract type risk.

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<sup>2/</sup> Contract type risk is the cost risk to contractors for different types of U.S. Government contracts.

Foreign military sales contracts. We reviewed 13 FMS procurements that had been negotiated for 10 customers between FYs 1987 and 1991. These contracts were for F-15, F-16, and F/A-18 aircraft and the Apache helicopter, as shown in Appendix A. The 13 contracts represented \$2.6 billion in sales of aircraft weapons systems to FMS customers during that period.

Costs incurred versus allowable profit. When assigning profit values for contract type risk, Air Force <sup>3/</sup> and Navy <sup>4/</sup> contracting officers did not fully consider the fact that contractors had already incurred over 50 percent of their costs. This occurred in 8 (61.5 percent) of the 13 FMS procurements that we reviewed. For example, on contract F33657-84-C-0192, P00297, for the sale of the F-16 to Bahrain, General Dynamics Corporation had incurred costs of over 65 percent of the undefinitized contract price. However, the Air Force's negotiating team assigned a value of 3.19 percent for contract type risk. This procurement was a firm-fixed-price contract that included progress payments. DFARS 215.971-3 prescribed 3 percent as the normal value for contract type risk, and 2 to 4 percent as the designated range for such contracts. The contracting officer's explanation for assigning a higher-than-normal contract type risk was that the contractor was not responsible for the Air Force's delay in definitizing the contract.

The contracting officer acknowledged in the PNM that General Dynamics Corporation had incurred substantial costs on the contract, and stated that this was considered in determining the contract type risk and the allowable profit rate. Although the contractor may not have been responsible for delays in negotiating the contract, a lower contract type risk should have been assigned, since General Dynamics Corporation had already incurred \$52 million (65.8 percent) of the total negotiated contract cost of \$79 million. Because the contractor already knew a great deal about the contract's actual costs, awarding a higher profit rate shifted the cost risk from the contractor to the U.S. Government.

Potential for reducing contract profits. If contracting officers had considered the fact that contractors had already incurred 50 percent or more of their costs before final prices were negotiated, the U.S. Government could have attempted to negotiate lower profits for contract type risk on eight FMS contracts. Contract documentation did not clearly show any attempts to negotiate lower profits, or show how contracting

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<sup>3/</sup> The F-15 and F-16 Systems Program Offices of the Air Force Aeronautical Systems Center.

<sup>4/</sup> The F/A-18 Program Office of the Naval Air Systems Command.

officers determined profit rates. We determined this by applying the weighted guidelines for contract type risk, reviewing PNMs, and discussing the contracts with Navy and Air Force contracting officers and price analysts. Although Air Force and Navy contracting officers acknowledged the potential for savings, they believed that contractors should not be penalized when delays in definitizing contracts were beyond the contractors' control. For example, the Air Force contracting officer for the Bahrain contract delayed negotiations because he was definitizing a larger contract for a U.S. procurement of F-16 aircraft. The contractor should receive a fair profit for risks assumed; however, after 50 percent or more of the contract costs have been incurred, the risk to the contractor is minimal.

Internal controls. For 11 of the 13 FMS contracts reviewed, Air Force and Navy contracting officers did not adequately explain in the PNMs how they assigned profit rates according to contract type risk. DFARS 215.903 requires that "contracting officers shall document their profit analyses in PNMs and present details of proposed profit amounts in weighted guidelines format or similar structured format." DFARS 215.808 also requires contracting officers to include DD Form 1547, "Record of Weighted Guidelines Application," in the PNMs if they use weighted guidelines to determine profits. We examined contract files at ASC and NAVAIR, and we did not find adequate explanations to support contract type risk values that had been assigned to contracts and used to negotiate contractor profits.

#### RECOMMENDATION FOR CORRECTIVE ACTION

We recommend that the Commanders of the Naval Air Systems Command and the Air Force Aeronautical Systems Center require contracting officers to prepare and maintain sufficient documentation to substantiate the profit values awarded for contract type risk. Documentation should include the costs already incurred by the contractor at the time of contract negotiation, and should explain the profit value assigned.

#### MANAGEMENT COMMENTS

Based on discussions with Navy officials and comments received from the Navy, we have deleted draft report Recommendation A.1. and changed Recommendation A.2. to Recommendation B., as shown above. The Navy concurred with Recommendation B., but did not agree that prime contractors received higher profit rates for fixed-price contracts when final prices were negotiated than were warranted by the level of contract type risk. The Navy stated that the contracting officer's supplementary explanation to the auditors was adequate and sound, and that even if the explanation was insufficient, it does not follow that an improper profit rate was assigned, considering the contract type risk.

The Navy was fully responsive to Recommendation B. and stated that it will remind all its contracting officers of the need to consider incurred costs when determining profit values and to ensure that sufficient documentation is prepared and maintained. The Navy also stated that the preparation and maintenance of profit documentation will be discussed at future Procurement Management Reviews.

The Air Force generally nonconcurred with the finding and recommendation. The Air Force stated that Finding B. asserts "that contracting officers should assign values as low as zero percent for contract type risk when costs have been incurred in accordance with DFARS 215.971-3(d)(2)." The Air Force noted that DFARS 215.971-3(d)(2) states, "may assign values as low as zero percent." The Air Force stated that the value of contract type risk, and all other profit factors, is subjective. The Air Force also stated that its contracting officers adequately explained the rationale used to assess contract type risk for the firm-fixed-price contracts we reviewed; therefore, the Air Force could not concur with "the general recommendation that additional information is needed." See Part IV for the full text of management's comments.

#### AUDIT RESPONSE TO MANAGEMENT COMMENTS

In responding to the final report, the Navy is requested to provide us with a completion date for the promised reminder to its contracting officers.

Concerning the finding, we agree that the contracting officer acted within his authority. Two Navy airframe contracts disclosed that over 55 percent of the \$1.1 billion contract cost was incurred at the time of final contract negotiation. However, the PNMs showed that profit rates of 3.5 percent and 4 percent, respectively, were awarded for contract type risk. The DFARS 215.971-3 recommends a range of 2 to 4 percent if incurred costs are low. There is no apparent disagreement over the finding that the contracting officer did not document and explain in the PNM the rationale for awarding a profit rate at the high end of the range (2 to 4 percent) when more than half the costs were already incurred on the contract, a circumstance that gives rise to questions.

We do not accept the Air Force's position that its PNMs fully explained the rationale used for assigning contract type risk values. The PNMs did not include specific documentation to support the elements affecting the contract type risk rates that were awarded. We believe that without specific documentation, neither the overall contract price nor the profit could be judged reasonable and proper. Contracting officers have the latitude to recognize peculiar risks associated with FMS and DoD contracts, as was done in this case, but they are required to document those

risks and explain how profit rates were determined. Management has raised contract performance issues to justify profit determinations; those issues are unrelated to contract type risk. Therefore, we request that the Air Force reconsider its position on Recommendation B. when responding to the final report. We changed the wording on page 11 of the final report to "may assign values as low as zero percent" to conform to DFARS 215.971-3(d)(2).

#### RESPONSE REQUIREMENTS FOR RECOMMENDATIONS

Responses to the final report are required from the addressees shown for the items indicated with an "X" in the chart below.

<u>Addressee</u>	<u>Response Should Cover:</u>			
	<u>Concur/ Nonconcur</u>	<u>Proposed Action</u>	<u>Completion Date</u>	<u>Related Issues*</u>
Commander, NAVAIR			X	IC
Commander, ASC	X	X	X	IC

\*IC = material internal control weakness



**PART III - ADDITIONAL INFORMATION**

- APPENDIX A: Summary of FMS Airframe Contracts Reviewed
- APPENDIX B: Summary of Potential Benefits Resulting from Audit
- APPENDIX C: Organizations Visited or Contacted
- APPENDIX D: Report Distribution





**APPENDIX A: SUMMARY OF FMS AIRFRAME CONTRACTS REVIEWED**

<u>Contract No., Country, FY</u>	<u>Definitization/ Modification Number</u>	<u>Total Amount Definitized</u>
<u>F-16</u>		
F33657-84-C-0192		
Egypt (FY 1991)	P00244	\$ 358,399,537
Bahrain (FY 1990)	P00297	90,071,648
FMS-2 (FY 1989)	P00209	
Thailand I		69,340,568
Norway		13,170,358
Indonesia		72,435,119
Thailand II		<u>35,406,540</u>
Subtotal		<u>\$ 638,823,770</u>
<u>F-15</u>		
F33657-91-C-2004		
Israel (FY 1991)	None	\$ 110,858,685
F33657-90-C-2254		
Saudi Arabia (FY 1990)	None	<u>333,539,042</u>
Subtotal		<u>\$ 444,397,727</u>
<u>F/A-18</u>		
N00019-85-C-0323		
Australia (FY 1987)	P00052	\$142,366,651
N00019-85-C-0228		
Spain (FY 1987)	P00092	264,876,000
N0019-89-C-0107		
Kuwait (FY 1991)	P00059	<u>860,167,758</u>
Subtotal		<u>\$1,267,410,409</u>

APPENDIX A: SUMMARY OF FMS AIRFRAME CONTRACTS REVIEWED (cont'd)

<u>Contract No., Country, FY</u>	<u>Definitization/ Modification Number</u>	<u>Total Amount Definitized</u>
<u>Apache Helicopter (AH-64A)</u>		
DAAJ09-89-C-A003 Egypt (FY 1990)	P00131	\$ 163,209,510
DAAJ09-89-C-A003 Israel (FY 1990)	P00131	<u>118,807,133</u>
Subtotal		<u>\$ 282,016,643</u>
Total		<u>\$2,632,648,549</u>

**APPENDIX B: SUMMARY OF POTENTIAL BENEFITS RESULTING FROM AUDIT**

<u>Recommendation Reference</u>	<u>Description of Benefit</u>	<u>Amount and/or Type or Benefit</u>
A.1.	Internal controls. Clarification of the directive will ensure equitable pricing of the F/A-18 EPEs for customers.	Nonmonetary.
A.2.	Compliance with FAR will result in an equitable allocation of R&D costs to all buyers of the EPE.	Nonmonetary.
B.	Compliance with regulations. Will ensure that contracting officers fully justify profit values awarded for contract type risk in accordance with FAR 15.808.	Nonmonetary.



## APPENDIX C: ORGANIZATIONS VISITED OR CONTACTED

### Office of the Secretary of Defense

Director, Defense Procurement, Washington, DC  
Comptroller of the Department of Defense, Washington, DC  
General Counsel of the Department of Defense, Washington, DC

### Department of the Army

Assistant Secretary of the Army (Research, Development and Acquisition), Washington, DC  
Headquarters, U. S. Army Materiel Command, Alexandria, VA  
U.S. Army Aviation Systems Command, St. Louis, MO  
U.S. Army Security Affairs Command, Alexandria, VA  
U.S. Army Security Affairs Command, New Cumberland, PA

### Department of the Navy

Assistant Secretary of the Navy (Research, Development and Acquisition), Washington, DC  
Navy International Programs Office, Washington, DC  
Naval Air Systems Command, Washington, DC

### Department of the Air Force

Assistant Secretary of the Air Force (Acquisition), Washington, DC  
Deputy Under Secretary of the Air Force for International Affairs, Washington, DC  
Air Force Materiel Command, Aeronautical Systems Division, Wright-Patterson Air Force Base, OH  
Air Force Systems Command, Andrews Air Force Base, MD

### Defense Organizations

Defense Contract Audit Agency, General Electric Company, Evandale Plant, Cincinnati, OH  
Defense Contract Audit Agency, General Electric Company, Lynn, MA  
Defense Logistics Agency  
Defense Contract Management Command  
Defense Plant Representative Office, General Dynamics Fort Worth Division, Fort Worth, TX  
Defense Plant Representative Office, General Electric Company, Cincinnati, OH  
Defense Plant Representative Office, General Electric Company, Lynn, MA  
Defense Plant Representative Office, McDonnell Douglas Aircraft Company, St. Louis, MO  
Defense Plant Representative Office, McDonnell Douglas Helicopter Company, Mesa, AZ

**APPENDIX C: ORGANIZATIONS VISITED OR CONTACTED** (cont'd)

Defense Organizations (cont'd)

Defense Institute of Security Assistance Management, Dayton, OH  
Defense Security Assistance Agency, Washington, DC

Non-Government Organizations

General Electric Company, Cincinnati, OH  
General Electric Company, Lynn, MA  
McDonnell Aircraft Company, St. Louis, MO

## APPENDIX D: REPORT DISTRIBUTION

### Office of the Secretary of Defense

Under Secretary of Defense for Acquisition  
Director, Defense Procurement  
Assistant Secretary of Defense (Production and Logistics)  
Comptroller of the Department of Defense

### Department of the Army

Secretary of the Army  
Assistant Secretary of the Army (Research, Development and  
Acquisition)  
U.S. Army Materiel Command  
Inspector General of the Army  
Auditor General, U.S. Army Audit Agency

### Department of the Navy

Secretary of the Navy  
Assistant Secretary of the Navy (Financial Management)  
Assistant Secretary of the Navy (Research, Development and  
Acquisition)  
Auditor General, Naval Audit Service  
Headquarters, Naval Air Systems Command

### Department of the Air Force

Secretary of the Air Force  
Assistant Secretary of the Air Force (Financial Management  
and Comptroller)  
Assistant Secretary of the Air Force (Acquisition)  
Air Force Audit Agency

### Defense Organizations

Director, Defense Contract Audit Agency  
Director, Defense Finance and Accounting Service  
Director, Defense Logistics Agency  
Director, Defense Security Assistance Agency  
Director, Defense Acquisition Regulatory Council

**APPENDIX D: REPORT DISTRIBUTION** (cont'd)

Office of Management and Budget  
U. S. General Accounting Office, National Security and  
International Affairs Division, Technical Information Center

Chairmen and Ranking Minority Members of the following  
Congressional Committees:

Senate Committee on Appropriations  
Senate Subcommittee on Defense, Committee on Appropriations  
Senate Committee on Armed Services  
Senate Committee on Foreign Relations  
Senate Committee on Governmental Affairs  
House Committee on Appropriations  
House Subcommittee on Defense, Committee on Appropriations  
House Committee on Armed Services  
House Committee on Foreign Affairs  
House Committee on Government Operations  
House Subcommittee on Legislation and National Security,  
Committee on Government Operations



**PART IV: MANAGEMENT COMMENTS**

Director, Defense Procurement

Department of the Navy

Department of the Air Force

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**Management Comments: Director, Defense Procurement**



ACQUISITION  
DP (DAR)

**OFFICE OF THE UNDER SECRETARY OF DEFENSE**

WASHINGTON, DC 20301-3000

JAN 12 1993

In reply refer to  
Holding File 92-H724-04

MEMORANDUM FOR DIRECTOR, FINANCIAL MANAGEMENT DIRECTORATE, OFFICE OF  
THE INSPECTOR GENERAL, DEPARTMENT OF DEFENSE

THROUGH: CHIEF, CONGRESSIONAL ACTIONS AND INTERNAL REPORTS *PR 1/14/93*

SUBJECT: Draft Audit Report on Procurement Prices Paid for Aircraft  
Weapons Systems for Foreign Military Sales (Project No.  
1FA-0061)

This responds to your memorandum of November 4, 1992, requesting  
comments on recommendation C.1 of the draft audit report.

Recommendation C.1 recommends that the Director of Defense  
Procurement direct the Defense Acquisition Regulations Council to add  
specific language to Defense Federal Acquisition Regulations  
Supplement (DFARS) 225.7303, to state that contracting officers  
should not accept foreign military sales (FMS) contract prices that  
are higher than other defense contract prices for the same item when  
contract terms and conditions are similar.

We do not believe this language is needed. The DFARS presently  
requires contracting officers to solicit, price, negotiate, and  
administer FMS contracts using the same procedures as for other  
defense contracts. The prices for both FMS and other defense  
contracts are the result of the rigorous price/cost analysis process  
which is already well defined in the DFARS.

FMS contract prices can be legitimately higher than those for  
other defense contracts for a number of reasons. Our current policy  
rightfully focuses on ensuring that the process for pricing FMS  
contracts is identical to the process for pricing other defense  
contracts. To supplant this existing process with an arbitrary rule  
that FMS contracts cannot be higher than other defense contracts  
would be improper and unnecessary.

Thank you for the opportunity to comment.

*Eleanor R. Spector*

Eleanor R. Spector  
Director, Defense Procurement

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Management Comments: Department of the Navy



THE ASSISTANT SECRETARY OF THE NAVY  
(Research, Development and Acquisition)  
WASHINGTON, D C 20350-1000

JAN 14 1993

MEMORANDUM FOR THE DEPARTMENT OF DEFENSE INSPECTOR GENERAL


Subj: DODIG DRAFT AUDIT REPORT ON PROCUREMENT PRICES PAID FOR  
AIRCRAFT WEAPONS SYSTEMS FOR FOREIGN MILITARY SALES  
PROJECT NO. 1FA-0061)

Ref: (a) DoDIG Memorandum of 4 November 1992; same subject  
(b) Telcon of 6 Jan 1993 between E. Cammack (OASN(RD&A)  
and L. Merdinian (DoDIG)

Encl: (1) DoN Response to DoDIG Draft Audit Report dated  
4 November 1992 (Project No. 1FA-0061)

As requested by reference (a), enclosure (1) provides our  
detailed comments on the draft report concerning the procurement  
prices paid for aircraft weapons systems for foreign military  
sales (FMS).

By reference (b), Ms. Merdinian of your office provided  
confirmation of an extension in the due date for our response  
from 4 January 1993 to 19 January 1993.

  
Gerald A. Cann

Copy to:  
NAVINGEN  
NAVCOMPT (NCB-53)  
COMNAVAIRSYSOM (02)

## Management Comments: Department of the Navy

Department of the Navy  
Response to  
DoDIG Draft Audit Report of 4 November 1992  
Procurement Prices Paid for Aircraft Weapons Systems  
for Foreign Military Sales  
Project No. 1FA-0061

Final Report  
Finding B.,  
Recommendation B

### Finding A:

For the F-15, F-16, and F-18 aircraft, the Navy and the Air Force awarded prime contractors higher profit rates for fixed-priced contracts when final prices were negotiated than were warranted by the level of contract type risk. Higher profit rates were awarded because DoD contracting officers did not properly consider the amount of costs already incurred by contractors, and payments that contractors had received, when applying FAR guidelines to determine allowable contractor profits. Navy and Air Force contracting officers did not adequately explain the rationale used to assess contract type risk for fixed-price contracts. As a result, contractors received excess profits of about \$31 million, considering the risk they assumed to produce aircraft for FMS customers.

### DoN Position:

Do not concur. The DoDIG's finding is based on the belief that since the explanation is considered inadequate regarding the single element "risk" of the Navy negotiator's weighted guideline profit calculation, the total negotiated contract profit and firm fixed price are higher than warranted. The Navy believes first, that the contracting officer's explanation was adequate and sound.<sup>1</sup> Second, even if the explanation is considered insufficient, it does not follow that an improper rate for risk was assigned and total profit negotiated. Third, when viewed in the total context of the firm fixed price, the overall profit and price were reasonable and proper.

The DoDIG review addressed three NAVAIR F/A-18 FMS procurements; Australia (FY 87), Spain (FY 87) and Kuwait (FY 91). No finding was made regarding the Australia contract resulting in the assumption that the price paid was reasonable compared to prices paid by DoD for similar items.

The DoDIG accurately states that DFARS 215.971-3(d)(2) requires contracting officers to "assess the extent to which costs have been incurred" prior to definitization, and to take

1. Spanish Procurement, Contract N00019-85-C-0228, Business Clearance 14520.3 and NAVAIR memorandum to DoDIG of 6 Apr 92
1. Kuwait Procurement, Contract N00019-89-C-0107, Business Clearance 18106.12

this assessment into account in determining the contracting officer's "Contract Type Risk" assigned value within the weighted guidelines analysis. The DoDIG statement in their Appendix B calculations that "the U.S. Government could have saved at least \$31 million" is based on DFARS 215.971-3. The DoDIG calculates this amount based on a strict pro rata calculation comparing cost incurred to negotiated cost. This method is neither explicitly or implicitly required or recognized by the cited DFARS provision. Use of proration does not take into consideration the timing of the risk in production contracts. It must be recognized that in complex major weapon systems, the early costs incurred tend to be for very low risk items, such as raw material purchases and other more routine efforts. As work proceeds to integration, final assembly and testing, the risk increases dramatically that initial technical approaches and detailed parts, subassemblies and subcontracted materials will require increasingly more expensive redesign, rework or retest. Thus, especially for complex weapon systems such as the F/A-18, it is inaccurate to consider cost risk on a linear basis. This is among the reasons the regulations were drafted to allow the contracting officer to reasonably assess the situation in the course of the price negotiation.

The DoDIG acknowledges that contracting officers have latitude to recognize peculiar risks associated with FMS contracts. In fact, the contracting officer's latitude in determining reasonable profits within and even outside of use of the Weighted Guidelines Method is provided via FAR 1.602-2, DFARS 215.971-3 and extensive government contract case law. The Kuwaiti negotiation clearly falls into the "above normal" category discussed in DFARS 215.971-3 in the following areas: minimal cost history existed for the non-recurring efforts for the unique configuration changes, the contract length is very long term (59 months), and the very nature of an FMS sale increases its risk, especially in the Kuwaiti situation because of the war. The unique configuration changes alone are of such complexity that an extensive flight test program is required (and still ongoing) from which the risk of all required changes/re-design remains with the contractor. Although these perspectives were explained during the DoDIG review and documented in enclosure (5) to NAVAIR memorandum to the DoDIG dated 6 April 1992, they were not discussed or referenced in the draft audit. The DoDIG failed to point out that both post negotiation memorandums (PNMs) cited unique risk factors associated with the F/A-18 contracts, including some as noted at DFARS 215.971-3. The DoDIG draft report does not recognize the potential offset of the "above normal" conditions.

The DoDIG also fails to point out that the Kuwaiti PNM explicitly discusses consideration of the substantial accumulation of actual costs in the contract type risk value assignment. Additionally, it was not pointed out that the

## Mangement Comments: Department of the Navy

Spanish PNM covers 3 concurrently negotiated, separate annual procurements with different profit rates assigned, specifically recognizing that the "rates vary in relation to the availability of actual costs incurred, and risks assumed by the contractor", or that the profit rate was lower for the FY 87 Spanish procurement than for the FY 87 U. S. F/A-18 procurement.

The DoDIG report omits the fact that the F/A-18 contracting officers were interviewed extensively and indicated that, while the percentage completion was considered by each contracting officer, as required, the unique risk factors associated with the Spanish FY87 and Kuwaiti FY90/91 FMS procurements overrode use of an approach giving a percentage completion pro rata approach to this WGL element. Thus, the DoDIG draft report finding, relating to the two F/A-18 contracts, is a matter of opinion regarding the degree of constraint/latitude available in complying with a single DFARS provision. Conversely, it fails to give any account to the contracting officer's latitude fully established in law and regulations (including the DFARS provision on which DoDIG stands).

While the DoDIG did not accept as justification the Air Force F-16 contracting officer's assertion that the contractor should not be penalized for government delays in negotiating, NAVAIR agrees that this is a significant factor. FAR 1.602-2(b) requires that the contracting officer ensure that contractors receive impartial, fair, and equitable treatment. F/A-18 USN companion quantities changed significantly in both FY90 and FY91, making it impossible to negotiate the Kuwaiti contract until the USN quantities were finalized. NAVAIR believes that it is not appropriate to penalize the contractor for the level of costs incurred when, in fact, the contractor bears no responsibility for the delay in negotiating, especially since risks remained high.

In summary, there is compelling evidence that contrary to the DoDIG assertions, both contracting officers met the requirement to consider the degree of completion in determining reasonable profit and adequately documented the factors they considered. Additionally, it is well documented that the firm fixed prices were reasonable and that regulations were adequately complied with.

Internal Controls Finding - The internal control finding that NAVAIR contract files did not contain "adequate explanations" regarding the contract type risks assigned for the FY87 Spanish and FY90/91 Kuwaiti FMS contracts is also a matter of opinion. As noted above, both contracts' PNMs explicitly address the matter and the Kuwaiti PNM goes so far as to cite the DFARS authority being invoked.

The DoDIG recognized that, as a result of NAVAIR studies



## Management Comments: Department of the Navy

more than two years before this report, corrective action was taken to ensure that contract files were complete and were reviewed by responsible officials. There was no recommendation regarding corrective action.

### Recommendation A.1 and A.2:

We recommend that the Commanders of the Naval Air Systems Command and the Air Force Aeronautical Systems Center:

1. Require contracting officers and price analysts to determine profit values for contract type risk based on costs that contractors have incurred before the final contract price is negotiated for aircraft procurements. If contractors have incurred most of their costs before contracts are definitized, require contracting officers to assign profit values as low as zero percent for contract type risk.

2. Require contracting officers to prepare and maintain sufficient documentation to explain the profit values awarded for contract type risk.

### DoN Position:

Concur. As discussed above in response to the findings, there is a difference in approach between the Navy and the DoDIG concerning the implementation of existing regulations. While the Navy relies on the judgment of the contracting officer to assess costs incurred when assigning a value within the weighted guidelines analysis, the DoDIG approach is based on a strict pro rata calculation comparing cost incurred to negotiated cost.

Notwithstanding the difference in approach, there is agreement that in establishing the Navy negotiation position, consideration must be given to the degree of costs incurred at the time of price negotiations. In addition, both of the DoDIG recommendations are substantially the same as requirements in existing regulations already imposed on and complied with by NAVAIR. Accordingly, NAVAIR will issue a reminder to all its contracting officers of the need to consider incurred costs when determining profit values, and to ensure that sufficient documentation is prepared and maintained. The preparation and maintenance of profit documentation will be a special interest item in future ASN(RD&A) Procurement Management Reviews.

### Finding B:

FMS customers will pay more of their pro rata share of research and development (R&D) costs than the Navy will when purchasing the F-404-GE-402 enhanced performance engine (EPE) for the F/A-18 aircraft. Because of an agreement between the Navy, McDonnell Aircraft Company (McAair), and the General Electric

## Mangement Comments: Department of the Navy

Company (GE), the Navy was exempted from paying its pro rata share of R&D costs. As a result, FMS customers will pay \$15.4 million in excess of their pro rata share of the total \$79.5 million of R&D costs.

### DoN Position:

Do not concur. The agreement between the Navy, McAir and GE represents an exception to the general policy of DFARS Section 225 requirements that DoD acquisitions for FMS requirements be conducted using the same contracting procedures as other DoD acquisitions. The agreement complied with DFARS 225.7304 (1988 edition) which provided that if a government to government agreement conflicts with pricing guidance previously set forth in DFARS 225.7304, the government to government agreement takes precedence. Therefore, since the recoupment provisions are included in the Letter of Offer and Acceptance between the US Government and Kuwait, and will be included in all future LOAs for F404 expanded performance engines, Navy has complied with applicable regulations.

The statement on page 20 that "NAVAIR did not request and was not given permission to recoup R&D costs exclusively from FMS customers" is inaccurate. The ASN (S&L) Pilot Contracting Activities Program (PCAP) approval dated 10 May 1989 (Attachment A) specifically referenced NAVAIR request DTG 091725Z May 1989 and NAVAIR letter dated 9 May 1989. The NAVAIR request (Attachment B) page 2 paragraph 4. titled, "Deviation Requested", specifically states "A class deviation is requested in order to allow the above contractors to defer the costs of developing a F404 EPE and to recover those Research and Development costs, exclusively, from FMS customers over anticipated foreign sales of up to 560 engines." The NAVAIR letter dated 9 May 1989 (Attachment C) provided documents in support of the PCAP program. The NAVAIR and GE/MCAIR/P&W Advance Agreement included as enclosure 1 to Attachment C clearly shows the Navy intent to allow the contractor team to recoup from future foreign purchasers the money it expended to develop the EPE.

The statement on page 18 that "the Government of Kuwait was interested in buying the F/A-18 equipped with the EPE..." significantly understates the situation. In fact, Kuwait considered the enhanced capability of the EPE critical in their selection of the F/A-18 and would not have purchased the weapon system without it. This is true for Switzerland as well. Our FMS customers drove this requirement -- not the U. S. Navy. Also, in this case, the EPE was established as the required engine for the Kuwait F/A-18 in the LOA signed 27 Aug 1988. The Government of Kuwait wanted the EPE engine but was unwilling to finance the entire development expense. No funded operational Navy requirement existed for the additional performance offered by the EPE engine and the Navy would not have purchased the EPE

## Management Comments: Department of the Navy

engine if the FMS requirement did not exist. Since the EPE engine was recognized as a specialized requirement for the Kuwait F/A-18, and other potential foreign purchasers expressed interest in an EPE equipped F/A-18, the advance agreement was set up to recover that portion of the development cost expended by the contractor team based on a fixed amount per engine on a prescribed quantity of engines sold to foreign customers.

The statement on page 22 that "Also, the Navy planned to buy the EPE before the decision was made to charge FMS and commercial customers for R&D costs on the engine" is also inaccurate. The EPE was proposed to the U. S. Navy before any current or potential customers. The Navy could not clearly justify the need to launch the development program that was proposed, but made the option available to prospective FMS customers, at their cost. The Government of Kuwait was the first who expressed the need for additional capability offered by the EPE, although they were unwilling to shoulder the full R&D cost for the engine upgrade. It was at this time that the contractor team proposed initially bearing the cost of developing the EPE with the Navy making specified contributions in the form of facilities and equipment. Those contributions are set forth as attachment A to the Advance Agreement. Under this arrangement, the contractor team was to bear the risk of recovering its portion of the EPE R&D costs through future sales of the EPE to foreign customers.

The Navy decision to adopt the EPE engine for its own use is documented in a Program Management Proposal (PMP) approved by the Secretary of the Navy on 7 March 1989. This decision was based on the development being completed for Kuwait and future FMS requirements, and came after Kuwait identified the EPE engine as a specialized feature in the LOA signed 27 Aug 88. The Government of Kuwait was informed of the Navy decision in a letter dated 5 May 1989 signed by the Deputy Assistant Secretary of the Navy, (Technology Transfer and Security Assistance) (Attachment D).

The Navy, in regard to EPE R&D cost recovery, complied with Section 21(e)(1) of the Arms Export Control Act of 1976. The 21 April 89 memorandum from the Deputy Assistant Secretary of the Navy, Technology Transfer and Security Assistance (Attachment E), issued prior to approval of the FAR deviation to permit costs to be deferred, provided an evaluation of the EPE cost sharing proposal in light of the Act and its implementing regulations, and interposed no objection. Department of Defense Directive 2140.2, dated 4 Aug 85, as revised 27 Jul 87, Recoupment of Nonrecurring Costs on Sales of U.S. Products and Technology which implements section 21(e) of AECA, states that the full costs of special RDT&E efforts performed for the benefit of particular foreign customer(s) shall be paid by those customer(s). It also provides that subsequent foreign purchasers who request the same specialized features that resulted from the special R&D effort

## Mangement Comments: Department of the Navy

may be charged a pro rata share of these costs. DoDD 2140.2 expressly states that the U.S. Government shall not be charged any nonrecurring recoupment charge if it adopts the feature for its own use.

The draft report's statement on page 22 that the Navy's \$23.5 million contribution "does not represent a fair share of the R&D costs for the EPE" is unfounded. The report incorrectly uses "pro-rata share" as the standard for fairness. While under no obligation to do so, the Navy has made a significant and equitable contribution to the EPE development effort. The Navy contribution included a no-cost lease of an F/A-18C aircraft and five F404 engines, retained risk of loss on the aircraft and engines, and provided facilities, test assets, personnel, and fuel and lubrication to the contractors at DoD user rates. These up-front contributions by the Navy made the estimated development cost \$56M instead of \$79.5M thus reducing the risk of recovery for the contractors and making this an acceptable business risk. This contribution also reduced the ultimate cost of the EPE development for the potential FMS customers by an estimated \$23.5M.

It must also be stated that the Navy's 5 May 89 letter clearly informed the Government of Kuwait of how the EPE development effort would be funded: the contractor team would develop, test and qualify the engine using their own funds; the U. S. Navy would contribute test facilities, aircraft assets and manpower support; and, the contractor team's costs would be recovered through international sales. These terms were fully acceptable to Kuwait; and, subsequent foreign customers were advised (and specifically accepted) the special EPE price arrangement.

### Recommendation B.1:

We recommend that the Commander, Naval Air Systems Command:

1. Require that foreign military sales customers pay no more than their pro rata share of the total research and development costs for the Enhanced Performance Engine.

### DoN Position:

Do not concur. DoDD 2140.2 dated 4 Aug 1985 states that the full costs of special RDT&E efforts performed for the benefit of particular foreign customer(s) shall be paid by those customer(s). It also provides that subsequent foreign purchasers who request the same specialized features that resulted from the special R&D effort may be charged a pro rata share of these costs. DoDD 2140.2 expressly states that the U.S. Government shall not be charged any nonrecurring recoupment charge if it adopts the feature for its own use. NAVAIR and the EPE advance

## Management Comments: Department of the Navy

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agreement and recoupment arrangement are in compliance with that regulation.

### Recommendation B.2:

We recommend that the Commander, Naval Air Systems Command:

2. Comply with provisions of the Federal Acquisition Regulation when allocating nonrecurring costs for research and development, to avoid dual pricing aircraft engines for foreign military sales and DoD sales.

### DoN Position:

Concur. NAVAIR is and will continue to comply with all policies and regulations including FAR and DFARS regulations on allocating nonrecurring costs for research and development for FMS and DoD sales.

Mangement Comments: Department of the Navy



DEPARTMENT OF THE NAVY  
OFFICE OF THE ASSISTANT SECRETARY  
(Research, Development and Acquisition)  
WASHINGTON, D C 20350-1000

10 FEB 1993

MEMORANDUM FOR DIRECTOR, FINANCIAL MANAGEMENT DIRECTORATE,  
DEPARTMENT OF DEFENSE INSPECTOR GENERAL

Subj: DODIG DRAFT AUDIT REPORT ON PROCUREMENT PRICES PAID FOR  
AIRCRAFT WEAPONS SYSTEMS FOR FOREIGN MILITARY SALES  
PROJECT NO. 1FA-0061)

Ref: (a) Meeting of 2 February 1993 between DoDIG and Navy  
Representatives  
(b) ASN(RD&A) Memorandum of 14 January 1993

Encl: (1) DoN Supplemental Response to DoDIG Draft Audit Report  
dated 4 November 1992 (Project No. 1FA-0061)

Enclosure (1) is furnished to document the discussions held  
during reference (a) and amplify our earlier response provided by  
reference (b).

We appreciate the opportunity to provide this additional  
information.

*E. G. Cammack*  
E. G. Cammack  
Director  
Procurement Policy

Copy to:  
NAVINSGEN  
NAVCOMPT (NCB-53)  
COMNAVAIRSYSCOM (02)

## **Management Comments: Department of the Navy**

Final Report  
Finding B.,  
Recommendation B.

Department of the Navy  
Supplemental Response to  
DoDIG Draft Audit Report of 4 November 1992  
Procurement Prices Paid for Aircraft Weapons Systems  
for Foreign Military Sales  
Project No. 1FA-0061

**Finding A:**

For the F-15, F-16, and F-18 aircraft, the Navy and the Air Force awarded prime contractors higher profit rates for fixed-priced contracts when final prices were negotiated than were warranted by the level of contract type risk. Higher profit rates were awarded because DoD contracting officers did not properly consider the amount of costs already incurred by contractors, and payments that contractors had received, when applying FAR guidelines to determine allowable contractor profits. Navy and Air Force contracting officers did not adequately explain the rationale used to assess contract type risk for fixed-price contracts. As a result, contractors received excess profits of about \$31 million, considering the risk they assumed to produce aircraft for FMS customers.

**DoN Supplemental Response:**

During numerous discussions with the DoDIG, the PCOs responsible for negotiating the contracts in question expanded upon the rationale documented in the business clearances and used to determine the applicable weighting for contract type risk. DFARS 215.9 identifies factors to be considered in determining the appropriate weighting for contract type risk. The information provided below on additional offsetting risks documents more of the rationale, adds more data and presents the information in a more structured format than previously provided.

**FY87 SPANISH F/A-18**

In the FY87 Spanish negotiation, the post-negotiation business clearance identified certain additional risks associated with foreign military sales. Among those specifically identified are currency exchange, language barriers, location, and management of foreign subcontractors. In NAVAIR's memo of 6 April 1992 and the discussions with the DoDIG, NAVAIR identified additional factors which contributed to the assignment of an above average weighting for contract type risk. All of that is set forth below.

**Length of Contract.** The FY87 Spanish contract was signed on August 1, 1986. The negotiation was completed in December 1988. The final delivery was not scheduled for completion until September 1989, thirty-eight months after contract award.

## Mangement Comments: Department of the Navy

Adequacy of Cost Data for Projections. Not Applicable.

Economic Environment. The contract had currency exchange provisions for foreign suppliers, but the contractor bore the risk of the currency fluctuations for its own in-country personnel.

Nature and Extent of Subcontractor Activity. The FY87 Spanish F/A-18 program had substantial subcontract activity. The contractor bore significant risks due to the number of subcontracts in Spain and also because, at the time of definitization, at least one major Spanish supplier responsible for complex composites, CASA, did not have firmly priced subcontracts. This supplier experienced significant technical difficulties over the life of the program such that there was some risk that an alternate source would have to be obtained.

Special Contract Provisions. There were no economic price adjustment provisions notwithstanding the length of the contract.

Incentive Provisions. Not Applicable.

Risks Associated with Contracts for FMS. MCAIR bore additional risks due to the significant involvement of Spanish industry (particularly in the more technically difficult composite area) as a subcontractor and co-producer of parts for the aircraft. In addition, MCAIR was responsible for providing technical education and support to a Spanish company, Inisel, until it was technically able to produce a unique piece of automatic test equipment. The transfer of the technology and the manufacturing expertise was an extraordinary undertaking in which MCAIR continued to bear the cost risk of schedule and technical performance. MCAIR's risks also increased due to the significant language difficulties associated with dealing with the FMS customer.

### **FY90/91 KUWAIT F/A-18**

In the FY90/91 Kuwaiti negotiation, the post-negotiation business clearance identifies additional considerations associated with the contract type risk factor assigned. Among those specifically identified are the conservative cost position used in the NAVAIR position, unallowable costs for pre-sale flight demonstration, unique equipment feasibility coordination, other marketing efforts, and Post-Kwaiti invasion studies. Those factors contributed to the assignment of the maximum weight for contract type risk. A discussion of those factors and additional data is presented below.



## Management Comments: Department of the Navy

Length of Contract. Because of the unique configuration of the Kuwaiti aircraft, the flight test program was extensive. The contract was signed in August 1989 and the negotiation was concluded in December 1991. The flight test program is not scheduled for completion until May 1994. The contractor is responsible for correcting deficiencies identified during the flight test program, thereby increasing the contract type risk of this program. The period of performance for this contract is fifty-eight months. In addition, the contractor began work without contractual coverage eleven months prior to contract award.

Adequacy of Cost Data for Projections. The Kuwaiti aircraft are uniquely configured. The major configuration differences include the Rohde Schwartz SECOS 610 radio, the Hazeltine APX 111 Interrogator/Transponder, an upgraded mission computer, new software, a unique HUD Videocamera and recorder, and the first EPE engines. In addition, Kuwait is receiving a modified Electronic Warfare suite because of releasability limitations. Minimal cost history was available at the time of settlement for the recurring effort associated with the Kuwaiti peculiar configuration. In addition, the post negotiation clearance points out that NAVAIR took an aggressive labor position and eliminated consideration for the F-15 shutdown disruption, CFE rollover costs, and the impact of a major accounting change. These were costs the PCO believed the contractor had a high probability of incurring but which the PCO did not recognize in his cost position.

Economic Environment. The contract was executed prior to the outbreak of hostilities between Iraq and Kuwait, but effort continued under the contract even when the survival of Kuwait, the customer, was certainly in some doubt. Communication with the customer on still unresolved contract and program matters was extremely difficult and considerably delayed during this crisis. All of this uncertainty is not naturally accommodated in a fixed price type of contract.

Nature and Extent of Subcontracted Activity. There is substantial subcontracted effort on this program.

Special Contract Provisions. There were no economic price adjustment provisions notwithstanding the unusual duration of the contract, nearly five years. The actual performance period is nearly six years if the pre-contractual effort is counted.

Incentive Provisions. Not Applicable.

## Management Comments: Department of the Navy

Risks Associated with Contracts for FMS. The program included additional risks such as unallowable costs for pre-sale flight demonstration, unique equipment feasibility coordination, other marketing efforts, and post-Kuwaiti invasion studies necessitated by the destruction of basing and training sites during the Persian Gulf War.

In summary, the business clearance recognizes the substantial accumulation of actuals under both contracts, but the PCO believes the information relied upon and presented above on the additional risks associated with contract type risk more than offsets the risk reduction associated with costs incurred. Although another PCO or analyst may reach a somewhat different result on the basis of the same data, the PCO does not believe that anyone could challenge his conclusions in this matter as having been unreasonable or unfair. The methodology and general rationale used to determine and negotiate profit on the FMS contract was essentially the same as that used for the US buy, particularly in the area of contract type risk. Furthermore, and of even greater importance, the PCO believes the overall profit and bottom-line contract price to be fair and reasonable. The pillars of the Navy's response to Finding B in the draft DoDIG Audit Report (IFA-0061) are succinctly set forth below:

### Finding B:

FMS customers will pay more of their pro rata share of research and development (R&D) costs than the Navy will when purchasing the F-404-GE-402 enhanced performance engine (EPE) for the F/A-18 aircraft. Because of an agreement between the Navy, McDonnell Aircraft Company (McA), and the General Electric Company (GE), the Navy was exempted from paying its pro rata share of R&D costs. As a result, FMS customers will pay \$15.4 million in excess of their pro rata share of the total \$79.5 million of R&D costs.

### DoN Supplemental Response:

DoD Directive 2140.2 dated 5 August 1985, Enclosure (2), page 2-7, paragraph F, states "The full amount of 'special' RDT&E and non-recurring production costs incurred for the benefit of particular customers shall be paid by these customers." In the absence of a DoD policy that addressed the specific circumstances of the EPE engine development and sale, the Navy relied on the guidance of "Special" to determine that the EPE R&D costs were applicable to treatment as specified in the foregoing DoD Directive. Notwithstanding lower-level Navy planning and discussions, Kuwait's decision to acquire the EPE was made before the U.S. made its decision.

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Recommendation  
A.1., A.2.

## Mangement Comments: Department of the Navy

The Navy facilitated and approved an agreement which set the terms for an equitable pro-rata sharing of those costs between the initial buyer of the engine (Kuwait) and prospective FMS customers. For the purposes of DoD Directive 2140.2, the RDT&E and nonrecurring production costs are being incurred for the benefit of Kuwait. However, the contractors agreed to bear the risk of the development effort less the pro-rata share assigned to Kuwait, pending any sales after the sale to Kuwait. The USN did not have a requirement for and could not justify expenditure of any US funds for the development of an EPE engine. Notwithstanding the foregoing, the USN made an equitable contribution to the undertaking in the form of assets (aircraft and engine leases and test facilities) and by agreeing to participate as a customer for the production engine.

The parties who agreed to this arrangement--Kuwait, Switzerland, and Finland, USN and the US contractors----fully understood and accepted the terms and conditions of the arrangement prior to agreeing to it. There was no subterfuge and no party had overwhelming leverage in establishing the terms of the agreement. It was judged fair in advance by all the parties.

The method for recouping the R&D costs for the EPE engine is in compliance with the DFARS. DFARS 225.7303 requires that FMS contracts be priced under the same principles as other defense contracts, including FAR Parts 15 and 31. The Kuwait contract was negotiated according to those same principles, except FAR 31.205-48 "Deferred Research and Development Costs", for which a deviation was obtained in accordance with DoD Policy.

No specifically applicable law or regulation has been cited as having been breached.

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## Management Comments: Department of the Air Force

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Finding B.,  
Recommendation B.



OFFICE OF THE ASSISTANT SECRETARY

DEPARTMENT OF THE AIR FORCE  
WASHINGTON DC 20330-1000

JAN 5 1993

SAF/AQ  
Pentagon RM 4E969  
Washington DC 20330-1000

### MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITING OFFICE OF THE INSPECTOR GENERAL DEPARTMENT OF DEFENSE

SUBJECT: Audit of Procurement Prices Paid on Air Weapons Systems for Foreign  
Military Sales (FMS) DODIG Material Code 1FA-0061 (Your memo, Nov 4,  
1992) -- INFORMATION MEMORANDUM

This is in reply to your memorandum requesting the Assistant Secretary of the Air Force (Financial Management and Comptroller) provide Air Force comments on the subject report

Finding A: We cannot fully concur in this finding. Although this finding consists of three parts, the key assertion is that contracting officers should assign values as low as zero percent for contract type risk when costs have been incurred in accordance with DFARS 215.971-3(d)(2). DFARS actually says "may assign values as low as zero" and leaves the value to the discretion of the contracting officer. On the surface, this may seem to be insignificant word-smithing, but in fact, it goes to the heart of the contracting officer's role in representing the government and to the heart of this audit finding.

The auditor contends that contractors were paid higher profit rates than warranted by the level of contract type risk because contracting officers did not properly consider the amount of costs already incurred during negotiations. The audit presumes the assignment of 0% for cost risk is appropriate for calculating profit in all cases when costs have already been incurred and, based on this, calculates that excess profits of \$31 million were paid on FMS contracts. Our review of the files identified in the audit indicated the cost risk factors used were generally at the low end of the recommended range (for example, in some cases 2.5% was assigned when the range was 2% to 4%) and that the consideration of other factors, in addition to costs incurred, should impact the cost risk factor assigned. For example, in one contract cited, the file documentation shows the analyst considered contract length, availability of prior cost data, and unique subcontract circumstances, as well as actual monetary expenditures, before assigning the cost risk factor. This was done in accordance with DFARS 215.971-3(d)(1).

## Management Comments: Department of the Air Force

The audit report discredits consideration of other factors when calculating cost risk, such as the fact that the contractor was not responsible for delays in definitization which allowed significant costs to be incurred before negotiations. While we agree that contractors should not be rewarded for intentionally postponing negotiations, incurring costs and reducing their risks, we cannot support penalizing contractors who have agreed to support the government by accepting undefinitized actions and then are unable to obtain a definitized contract due to government delays. In one case cited, the file documents that cost risk was not reduced commensurate with costs incurred because the government had caused part of the delay in negotiations which allowed significant costs to be incurred. The delay supported the government's decision concerning prioritizing other negotiations and use of available resources. This was one of the factors considered in determining cost risk. In such instances, discretion must be used and consideration given to the return on investment the contractor could reasonably have anticipated when entering the undefinitized action. An unreasonable reduction in that return, due to government causes which are beyond the contractor's control, could be unfair and result in reluctance by contractors to accept undefinitized actions in the future.

The value of cost risk, and all other profit factors, is subjective. While the cost risk factors used in some contracts reviewed by the auditor may be higher than expected, the blanket use of 0% when costs have been incurred would not be fair, is not required by regulation and is not consistent with the flexibility deliberately provided by DFARS.

Based on this, we believe Finding A is subjective. The resulting assumption of measurable excess profits is inappropriate. The blanket use of 0% for cost risk when some costs have been incurred is as erroneous as the blanket use of 4% would be, therefore, any projected saving are discretionary and un-measurable. An additional concern in this finding and the executive summary is the wording which indicates the asserted overpayment of \$31 million is somehow related to the fact that FMS contracts are involved. A post settlement review of any negotiation by non-participants is likely to reveal disagreements in the appropriateness of the factors assigned. A finding that, in the opinion of the auditor, the government's objective may have been too high can be asserted, but no correlation between this assessment and FMS peculiar contracting procedures has been shown or is involved. We request that this, above all other issues, be corrected before this audit is issued.

**Recommendation A1:** This recommendation is already a requirement in DFARS 215.971-3(d)(2). The findings that support this recommendation are subjective. The contracting officers involved feel the profit objectives established were consistent with DFARS requirements to consider all relevant factors, including costs incurred.

**Recommendation A2:** The audit states that contracting officers did not adequately explain the rationale used to assess contract type risk for fixed price contracts. For the Royal Saudi Air Force F-15 buy cited in the report, paragraph 4.b.(7) of the PNM provides information relating to contract length, availability of prior cost data, unique subcontract circumstances, and actual monetary expenditures as related by the PCO. These represent

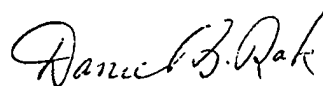
## Management Comments: Department of the Air Force

elements that specifically affected the contract type risk determination for this action. Based on this type of specific support, we cannot concur in the general recommendation that additional documentation is needed.

Finding C and Recommendation C2: The assessment that FMS and US prices should be identical implies that the Air Force should not accept a lower price for US items if the contractor does not similarly reduce the FMS item prices. Per the audit, "the FMS cost factor compensated P&W (Pratt and Whitney) for additional costs and risks of producing the engine for foreign customers, such as selling expenses and R&D costs." These are legitimate explanations for cost differences. In addition, the audit points out that this was part of the P&W acknowledged "marketing strategy to generate future sales." Future sales represent a risk. Since risk carries an economic impact, it would be appropriate for the contractor to consider this when determining the expected profit and corresponding total price to propose. Under these circumstances, unless we have an indication that the price differential results in FMS buys subsidizing US buys, a change in the contractor's proposed and negotiated pricing structure is inappropriate.

The contract in question, F33657-88-C-0134, was awarded as the result of a dual source competition. The recommendation to renegotiate this competitive acquisition on a sole source basis, in order to obtain the same price for US and FMS buys, is inconsistent with FAR. Likewise, we do not believe FAR supports retroactive negotiations. Based on this, Recommendation C2 should be eliminated before the final audit report is issued.

Appendix B: As previously discussed, the calculation of excess profit is based on an arbitrary assessment of cost risk without regard to other elements that should also be considered. In addition, this calculation assumes that an adjustment in the government's objective will result in the same adjustment in the price negotiated. Since contractors are not bound by the weighted guidelines, that conclusion cannot be drawn. Appendix B should be deleted in its entirety because it is based on erroneous and unsupported assumptions.



DANIEL S. RAK  
Deputy Assistant Secretary  
(Acquisition)

CC: SAF/AQXA  
SAF/FMPF

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